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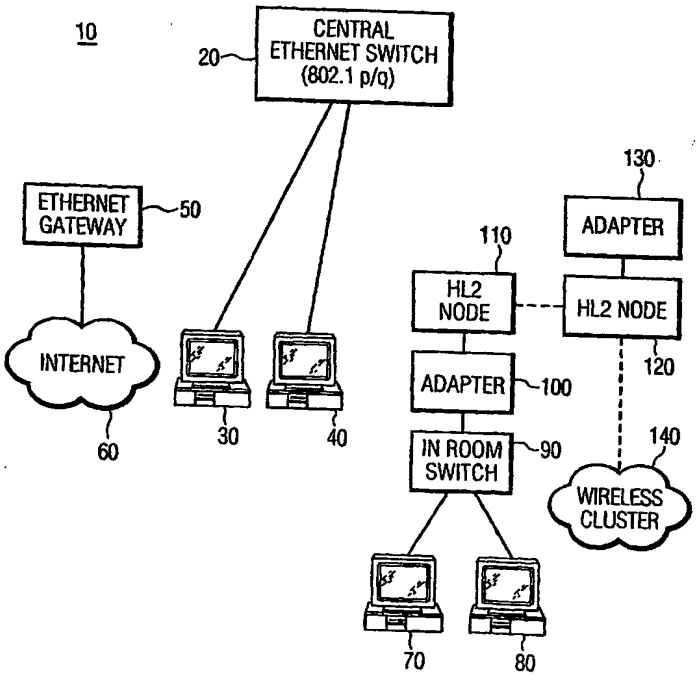
(54) Title: METHOD AND APPARATUS FOR MAPPING PRIORITIZED QOS PACKETS TO PARAMETERIZED QOS CHANNELS AND VICE VERSA



(57) Abstract: An apparatus and method are disclosed for adapting prioritized QoS data packets such as those used by Ethernet devices with IEEE802.1q priorities to parameterized data packets that can be transmitted over the Isochronous Channel of an IEEE1394, HiperLAN2 or similar network or serial bus with Isochronous Services. An adapter device uses the presence of a priority on a Priority based QoS LAN as an indication to set up an Isochronous Channel on the IEEE1394, HiperLAN2 or similar device for the transfer of a potential stream. When the adapter device sees the priority field and it has determined that to get to the destination device, the next segment is across a LAN with Isochronous services (e.g. IEEE 1394 or HiperLAN2), the adapter sets up an Isochronous channel (if it is the first packet of a flow) to the next device in the stream path and then forwards that packet and any future packet that is marked identically (addresses and priorities) down that Isochronous Channel. The adapter is also configured to convert packets that have been sent over the Isochronous Channel in the manner just described back to prioritized data packets for transmission to an Ethernet or other prioritized QoS device. Another feature of the adapter and method is dynamic adjustment of reserved bandwidth size based on activity within a channel.

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